

AMENDMENTS TO THE SPECIFICATION

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Please replace paragraph [0044] of the published version of the present application (i.e., U.S. Patent Application Publication No. US 2002/0001555) with the following amended paragraph:

[0044] Referring to FIG. 1, reactor effluent obtained by the direct reaction of propane, ammonia and oxygen in the fluid bed reactor (not shown) over a fluid bed ammoxidation catalyst is passed via line 1 into quench column 3. In quench column 3, the reactor effluent containing product acrylonitrile and unreacted ammonia is contacted with a lean ammonium/phosphate quench solution of pH 3.5 or less which strips unreacted ammonia from the effluent without absorbing significant CO_2 , producing an ammonia-free product overhead stream containing crude acrylonitrile. The crude acrylonitrile passes overhead via line 5 into conventional recovery and purification sections (not shown) for subsequent recovery of commercially pure acrylonitrile, crude acetonitrile and hydrogen cyanide. Examples of conventional recovery and purification procedures can be found in U.S. Pat. No. 3,936,360 incorporated by reference herein. The quench bottoms leave quench column 3 via line 7 and enter a quench stripper 9. A stripping gas, substantially free of CO_2 , comprising a recycle stream comprising a mixture of propane, carbon monoxide, and nitrogen is passed via line 13 into stripper 9 to remove any residual volatile impurities, such as, for example, acrylonitrile, acetonitrile or hydrogen cyanide contained in the quench bottoms. (Volatile is used in a comparative sense as to the ammonia chemically bound in the ammonium phosphate solution.) Alternatively, the quench bottoms may be fed to stripper 9 where they are heated so as to drive off any of the residual volatile impurities albeit at a temperature lower than that used to cause decomposition of the diammonium phosphate present in the quench bottoms. The overhead stripper gas ~~13~~ containing these residual monomers is recycled back into quench column 3 via line 11 for further recovery of useful products. The stripped quench bottoms are passed from stripper 9 via line 15 into a wet oxidation reactor 17 wherein oxygen is passed via line 25 and a conventional catalytic wet oxidation take place to remove unwanted impurities such as polymers. In addition, the diammonium phosphate contained in the quench stripper bottoms is heated to free the ammonia and convert the diammonium phosphate in solution to monoammonium phosphate. An optional caustic material

is added to wet oxidation reactor 17 to convert ammonium carbamate to an insoluble carbonate. Suitable caustic materials include NaOH, KOH, MgOH, CaOH and the like, as well as mixtures thereof.